IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Claims 1, 2, 7, 20 and 26 have been amended, and no new matter has been entered. Claims 1-27 are pending and under consideration.

1. (Currently amended) A method of providing information on an error in a hard disk drive including a first interface unit transmitting data reproduced from a medium and receiving data to be recorded on the medium and a second interface unit providing the error information to an outside of the hard disk drive, comprising:

obtaining the error information including a type of the error occurring in the hard disk drive and state information indicating operation conditions of the hard disk drive; and

outputting the error information and the state information <u>in real time</u> to the outside via the second interface unit.

2. (Currently amended) The method of claim 1, wherein outputting of the error information and of the state information to the outside is performed ~~in real time irrespective~~ <u>independent</u> of a data process performed using the first interface unit.

3. (Original) The method of claim 1, wherein:
obtaining the error information comprises
    operating the first interface unit based on a first command standard
obtaining the state information comprises
    operating the second interface unit based on a second command standard.

4. (Original) The method of claim 3, wherein the first command standard is an ATAPI command standard.

5. (Original) The method of claim 1, wherein the outputting of the error information and of the state information are reported in real time using a serial interface, as the second interface unit, which does not follow the ATAPI command standard.

6.   (Original) The method of claim 1, wherein the outputting of the state information comprises:

notifying a host of the state information if the error occurs while executing a command issued from the host.

7.   (Currently amended) A hard disk drive which records data applied from an outside on a medium or reproduces data recorded on the medium and provides the reproduced data to the outside, comprising:

a first interface unit transmitting data reproduced from the medium to the outside and receiving data to be recorded on the medium from the outside;

a hard disk controller controlling data to be recorded on the medium or reproduced from the medium and providing error information including a type of an error occurring in the hard disk drive;

a state information manager managing the error information provided by the hard disk controller and state information indicating operation conditions of the hard disk drive; and

a second interface unit outputting the error information and the state information provided by the state information manager in real time to the outside when an error occurs.

8.   (Original) The hard disk drive of claim 7, wherein the second interface unit performs a serial interface.

9.   (Original) A data processing apparatus including a hard disk drive having a first interface unit transmitting data reproduced from a medium and receiving data to be recorded on the medium and a second interface unit providing error information to an outside, comprising:

a first controller corresponding to the first interface unit;

a second controller corresponding to the second interface unit;

a third controller controlling data recording and reproducing operations of the hard disk drive by using the first controller, and receiving the error information provided by the hard disk drive by using the second controller; and

an output device to provide the error information to a user.

10.   (Original) The data processing apparatus of claim 9, wherein the third controller receives state information indicating operation conditions of the hard disk drive and the error

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information from the hard disk drive via the second controller, determines an appropriate measure to deal with an error which occurs in the hard disk drive based on the error information and the state information, and informs the user of the appropriate measure.

11.   (Original) The data processing apparatus of claim 9, wherein the data processing device is a personal video recorder.

12.   (Original) A method of providing information about an error occurring in a hard disk drive including first and second interface units to transmit data to and to receive data from a recording medium while providing the error information to an outside of the hard disk drive, comprising:

acquiring the error information including a type of the error occurring in the hard disk drive and state information indicating operation conditions of the hard disk drive; and

outputting the error information and the state information to the outside via only the second interface unit.

13.   (Original) A hard disk drive to record data applied from an outside on a medium or to reproduce data recorded on the medium and to provide the reproduced data to the outside, comprising:

a first interface unit to transmit the data reproduced from the medium to the outside and to receive the applied data to be recorded on the medium from the outside;

a hard disk controller to control the applied data to be recorded on the medium or to control the recorded data to be reproduced from the medium and to provided error information of at least a type of an error occurring in the hard disk drive;

a state information manager to manage the error information and state information indicating operation conditions of the hard disk drive; and

a second interface unit to output the error information and the state information to the outside in real time.

14.   (Original) A hard disk drive to record data applied from an outside on a medium or to reproduce data recorded on the medium and to provide the reproduced data to the outside, comprising:

a first interface unit to transmit the data reproduced from the medium to the outside and to receive the applied data to be recorded on the medium from the outside;

a hard disk controller to control the applied data to be recorded on the medium or to control the recorded data to be reproduced from the medium;

a state information manager to manage state information indicating operation conditions of the hard disk drive; and

a second interface unit to output the state information to the outside in real time.

15.   (Original) A hard disk drive to record data applied from an outside on a medium or to reproduce data recorded on the medium and to provide the reproduced data to the outside, comprising:

a first interface unit to transmit the data reproduced from the medium to the outside and to receive the applied data to be recorded on the medium from the outside;

a controller to control the applied data to be recorded on the medium or to control the recorded data to be reproduced from the medium and to provided error information of at least a type of an error occurring in the hard disk drive; and

a second interface unit to output the error information in real time.

16.   (Original) The hard disk drive of claim 15, further comprising:

a state information manager to manage state information of the hard disk drive and to receive the error information from the controller.

17.   (Original) The hard disk drive of claim 16, wherein the state information is at least one of an operation temperature of the hard disk drive, a cut-off frequency, a boost value, a bandwidth or a gain value of a finite inverse response filter.

18.   (Original) A data processing apparatus including a hard disk drive having first and second interface units to transmit data to and to receive data from a recording medium while providing error information to an outside of the hard disk drive, comprising:

a first controller corresponding to the first interface unit to control data recording and reproducing operations of the hard disk drive;

a second controller corresponding to the second interface unit to control receiving the error information provided by the hard disk drive;

a third controller managing the first and second controllers; and

an output device to provide the error information to a user.

19.　(Original) The data processing apparatus of claim 18, wherein the third controller receives state information indicating operation conditions of the hard disk drive and the error information from the hard disk drive via the second controller to determine an action to be performed to handle an error which occurs in the hard disk drive based on the error information and the state information, and informs the user of the action to be performed.

20.　(Currently amended) A data processing apparatus including a hard disk, comprising:

a first interface unit to transmit data reproduced from a medium to an outside of the hard disk drive and to receive applied data to be recorded on the medium from the outside of the hard disk drive;

a controller to control the applied data to be recorded on the medium or to control the recorded data to be reproduced from the medium and to ~~provided~~ provide error information of at least a type of an error occurring in the hard disk drive;

a second interface unit outputting the error information provided from ~~the controller to the outside of~~ the hard disk drive to the controller in real time; and

an output device to provide the error information to a user.

21.　(Original) The data processing apparatus of claim 20, wherein the controller receives state information indicating operation conditions of the hard disk drive and the error information from the hard disk drive via the second interface unit to determine an action to be performed to handle an error which occurs in the hard disk drive based on the error information and the state information, and informs the user of the action to be performed.

22.　(Original) The data processing apparatus of claim 20, wherein the first interface unit operates based on a first command standard while the second interface unit operates based on a second command standard

23.　(Original) The data processing apparatus of claim 20, further comprising:

a state information manager to manage state information of the hard disk drive and to receive the error information from the controller.

24.　(Original) The data processing apparatus of claim 23, wherein the state

information is at least one of an operation temperature of the hard disk drive, a cut-off frequency, a boost value, a bandwidth or of a gain value of a finite inverse response filter.

25.　(Original)　The data processing apparatus of claim 20, wherein the first and second interface units are separate from each other.

26.　(Currently amended)　A method of providing information about an error occurring in a peripheral computer device including first and second interface units to transmit data to and to receive data from a recording medium while providing the error information to an outside of the peripheral computer device, comprising:

　　acquiring the error information including a type of the error occurring in the peripheral computer device and state information indicating operation conditions of the peripheral computer device; and

　　outputting the error information and the state information in real time to the outside via only the second interface unit.

27.　(Original)　A peripheral computer device to record data applied from an outside on a medium or to reproduce data recorded on the medium and to provide the reproduced data to the outside, comprising:

　　a first interface unit to transmit the data reproduced from the medium to the outside and to receive the applied data to be recorded on the medium from the outside;

　　a controller to control the applied data to be recorded on the medium or to control the recorded data to be reproduced from the medium and to provided error information of at least a type of an error occurring in the peripheral computer device; and

　　a second interface unit to output the error information in real time.